

ON THE VALIDITY OF THE
GENERIC NAME *COCHLEANTHES* RAF.

BY

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THE orchid genus which is known as *Warscewiczella* Rchb.f. appears to be worthy of recognition, but the validity of this name is open to serious doubt. We consider that the genus is closely related to *Chondrorhyncha* of the *Huntleyinae*, but many of the species which properly belong to *Warscewiczella* have been referred to various genera of the *Zygopetalinae*. The entire *Huntleya-Zygopetalum* alliance is in need of a critical study. It is, however, essential to clarify some of the nomenclatorial problems prior to the undertaking of such a study, and a start in this direction has been made in the present paper.

Reichenbach established the genus *Warscewiczella* in 1852, basing his concept on *Warrea discolor* Lindl., and pointing out its relationship to *Warrea* and *Chondrorhyncha*. In 1836, Lindley had described, as *Zygopetalum cochleare*, a plant from Trinidad which cannot be accommodated in *Zygopetalum* as now interpreted, but which conforms with Reichenbach's *Warscewiczella*. In the same year, Rafinesque indicated that Lindley's *Zygopetalum cochleare* represented a distinct genus which he called, quite appropriately, *Cochleanthes*, citing as type "*Zygopetalum cochleare* Lindl. b. reg. 1857" and stating that it was "quite a different G. from *Z. makai* H. b. m.

2748." Rafinesque proposed for Lindley's *Zygopetalum cochleare* a new specific name under *Cochleanthes* — *C. fragrans* — instead of making the correct transfer.

There is every reason to accept *Cochleanthes* as the proper name for this generic concept, even though it has been almost completely neglected¹ in orchidological literature. Under the International Code of Botanical Nomenclature, the only way to avoid a change to *Cochleanthes* would be to conserve *Warscewiczella*. This procedure we are not willing to propose, since the genus is a small one and since none of the species involved has ever assumed important stature in horticulture.

Cochleanthes Rafinesque Fl. Tellur. 4 (1836) 45.

Warscewiczella Rchb.f. in Bot. Zeit. 10 (1852) 635.

Zygopetalum sect. *Cochleare* Rchb.f. in Walp. Ann. Bot. Syst. 6 (1863) 652.

Zygopetalum sect. *Warscewiczella* Rchb.f. ibid. 6 (1863) 653.

ORIGINAL DESCRIPTION :

930. **Cochleanthes** R. (shell fl.) petalis connivens ovat. undul. lab. cochleato bilobo, basi crista cochleata (ut plecton plicata) calcar col. clavata, anth. 2loc., 2labiata, pollinia 4eq. caulescens, fl. axillaris. — Type *C. fragrans* R. fol. lanceol. 5nervis, pedic. lfl. axillaris. Trinidad. fl. ample fragrant white, lip purple. It is *Zygopetalum cochleare* Lindl. b. reg. 1857, but quite a different G. from *Z. makai* H. b. m. 2748, with petals secund, lip flabellate with a spur, anther calciform, 4 uneq. pollen."

Cochleanthes amazonica (Rchb.f. & Warsc.) R. E. Schultes & Garay comb. nov.

Warscewiczella amazonica Rchb.f. & Warsc. in Bonpl. 2 (1854) 97.

¹ Hoehne (in Hoehne, Fl. Brasilia 12: pt. 7 (1953) 171), in referring to "*Cochleanthus* Rafin.", has pointed out that this is the prior name, but, for reasons not explained, he continued to employ *Warscewiczella*.

Zygopetalum amazonicum (Rchb.f. & Warsc.) Rchb.f.
in Walp. Ann. Bot. Syst. 6 (1863) 655.

Warscewiczella Lindeni Hort. in Journ. Hort. 1 (1892)
449.

Zygopetalum Lindeni (Hort.) Rolfe in Lindenia 8
(1892) 5, t. 337.

Cochleanthes aromatica (*Rchb.f.*) *R. E. Schultes &*
Garay comb. nov.

Zygopetalum aromaticum Rchb.f. in Bot. Zeit. 10
(1852) 668.

Warscewiczella aromatica (Rchb.f.) Rchb.f. in Walp.
Ann. Bot. Syst. 6 (1863) 654.

Zygopetalum Wendlandi Rchb.f. in Beitr. Orch.
Centr.-Amer. (1866) 74.

Bollea Wendlandiana Hort. ex Gard. & For. 1 (1888)
315.

Warscewiczella Wendlandi (Rchb.f.) Schltr. in Beih.
Bot. Centralbl. 36, pt. 2 (1918) 494.

Chondrorhyncha aromatica (Rchb.f.) P. H. Allen in
Ann. Missouri Bot. Gard. 36 (1949) 85.

Cochleanthes bidentata (*Rchb.f. ex Hemsl.*) *R. E.*
Schultes & Gary comb. nov.

Zygopetalum bidentatum Rchb.f. ex Hemsl. in Salvin
Biol. Centr. Amer. 3 (1885) 251.

Warscewiczella bidentata (Rchb.f. ex Hemsl.) Schltr.
in Beih. Bot. Centralbl. 36, pt. 2 (1918) 494.

Cochleanthes candida (*Lindl.*) *R. E. Schultes &*
Garay comb. nov.

Warrea candida Lindl. in Paxt. Fl. Gard. 1 (1851)
32, fig. 22.

Huntleya candida Hort. ex Lindl. loc. cit., *in synon.*

Zygopetalum candidum (Lindl.) Rchb.f. in Walp.
Ann. Bot. Syst. 6 (1863) 656.

Cochleanthes digitata (*Lehm.*) *R. E. Schultes* & *Garay* *comb. nov.*

Warrea digitata Lemaire in *Illustr. Horticol.* 3 (1856) Misc. p. 70.

Huntleya imbricata Pinel. ex Lem. in *Illustr. Horticol.* 4 (1857) sub t. 152, *in synonym.*

Warszewiczella digitata Barb.-Rodr. *Struct. des Orchid.* (1883) t. 13, fig. 3.

Cochleanthes discolor (*Lindl.*) *R. E. Schultes* & *Garay* *comb. nov.*

Warrea discolor Lindl. in *Journ. Hort. Soc. Lond.* 4 (1849) 265.

Warszewiczella discolor (*Lindl.*) Rehb.f. in *Bot. Zeit.* 10 (1832) 636.

Zygopetalum discolor (*Lindl.*) Rehb.f. in *Walp. Ann. Bot. Syst.* 6 (1863) 655.

Chondrorhyncha discolor (*Lindl.*) P. H. Allen in *Ann. Missouri Bot. Gard.* 36 (1949) 87.

Cochleanthes flabelliformis (*Sw.*) *R. E. Schultes* & *Garay* *comb. nov.*

Epidendrum flabelliforme Sw. *Prodr.* (1788) 123.

Cymbidium flabelliforme (*Sw.*) Sw. in *Nov. Act. Ups.* 6 (1799) 73.

Cochleanthes fragrans Raf. *Fl. Tellur.* 4 (1836) 45.

Zygopetalum cochleare Lindl. in *Bot. Reg.* 22 (1836) t. 1857.

Eulophia cochleata Knight ex Hooker in *Bot. Mag.* 64 (1837) sub t. 3585, *in synonym.*

Zygopetalum cochleatum Paxton *Magaz. Bot.* 4 (1838) 279.

Eulophia cochlearis (*Lindl.*) Steudel *Nom.*, ed. 2, 1 (1840) 605.

Warszewiczella cochlearis (*Lindl.*) Rehb.f. in *Bot. Zeit.* 10 (1852) 714.

Huntleya imbricata Hort. ex Rchb.f. *ibid.*, *in synonym.*
Zygopetalum flabelliforme (Sw.) Rchb.f. in Walp. Ann. Bot. Syst. 6 (1863) 652.

Zygopetalum conchaceum Hoffmanssegg ex Rchb.f. *ibid.*, *in synonym.*

Cymbidium flabellifolium Sw. ex Griseb. Fl. Brit. West Ind. Isl. (1864) 629, *in synonym.*

Warszewiczella cochleata Barb. Rod. Struct. des Orchid. (1883) t. 13, fig. 4.

Zygopetalum Gibeziae N. E. Brown in Lindenia 4 (1888) 79, t. 181.

Warszewiczella Gibeziae (N. E. Brown) Stein Orchideenb. (1892) 595.

Warszewiczella flabelliformis (Sw.) Cogn. in Urban Symb. Antill. 4 (1903) 182.

Cochleanthes heteroclita (Poepp. & Endl.) R. E. Schultes & Garay *comb. nov.*

Maxillaria heteroclita Poepp. & Endl. Nov. Gen. ac Sp. 1 (1836) 37, t. 63.

Zygopetalum rhombilabium C. Schweinf. in Amer. Orch. Soc. Bull. 12 (1944) 422.

Warszewiczella heteroclita (Poepp. & Endl.) Hoehne in Arq. Bot. Est. S. Paulo, nov. ser., 2, pt. 6 (1952) 126.

Cochleanthes ionoleuca (Rchb.f.) R. E. Schultes & Garay *comb. nov.*

Zygopetalum ionoleucum Rchb.f. in Bot. Zeit. 23 (1865) 99.

Warszewiczella ionoleuca (Rchb.f.) Schltr. in Fedde Rep. Beih. 7 (1920) 267.

Cochleanthes Klugii (C. Schweinf.) R. E. Schultes & Garay *comb. nov.*

Zygopetalum Klugii C. Schweinf. in Bot. Mus. Leaflet. Harvard Univ. 15 (1952) 150.

Cochleanthes Lueddemanniana (Rchb.f.) R. E. Schultes & Garay comb. nov.

Warszewiczella Lueddemanniana Rchb.f. in Hamb. Gartenzeit. 16 (1860) 179.

Zygopetalum Lueddemannianum (Rchb.f.) Rchb.f. in Walp. Ann. Bot. Syst. 6 (1863) 653.

Cochleanthes marginata (Rchb.f.) R. E. Schultes & Garay comb. nov.

Warszewiczella marginata Rchb.f. in Bot. Zeit. 10 (1852) 636.

Huntleya marginata Hort. ex Rchb.f., loc. cit.

Warrea marginata Rchb.f., loc. cit.

Warrea quadrata Lindl. in Gard. Chron. (1853) 647.

Warszewiczella velata Rchb.f. in Bot. Zeit. 23 (1865) 99.

Zygopetalum quadratum Pfitz. Vergl. Morph. Orch. (1881) 58.

Chondrorhyncha Lipsicombiae Rolfe Kew Bull. (1912) 133.

Chondrorhyncha marginata (Rchb.f.) P. H. Allen in Ann. Missouri Bot. Gard. 36 (1949) 88.

Cochleanthes trinitatis (Ames) R. E. Schultes & Garay comb. nov.

Zygopetalum trinitatis Ames Sched. Orchid. 3 (1923) 21.

Cochleanthes Wailesiana (Lindl.) R. E. Schultes & Garay comb. nov.

Warrea Wailesiana Lindl. in Journ. Hort. Soc. 4 (1849) 264.

Zygopetalum Wailesianum (Lindl.) Rehb.f. in Walp. Ann. Bot. Syst. 6 (1863) 656.

Warscewiczella Wailesiana (Lindl.) Rehb.f. ex Morren in Belg. Hort. 28 (1878) 183.

EXCLUDED SPECIES

Warscewiczella calloglossa Schltr. in Fedde Rep. 12 (1913) 216 = *Chondrorhyncha calloglossa* (Schltr.) P. H. Allen.

Warscewiczella Gehrtiana Hoehne in Arq. Bot. Est. S. Paulo, nov. ser., 1, pt. 1 (1945) 5 = *Hoehneella Gehrtiana* (Hoehne) Ruschi.